

Amendments to the Specification:

Please add the following paragraphs at the end of page 22:

-- It is possible to produce flexible circuits by printing or casting soluble polyimide onto cured Parmod® circuits followed by curing the resin. In this way the dielectric as well as the metal circuitry is produced by an additive technique thereby saving substantial waste of an expensive raw material. Matrimid polyimide from Ciba Geigy was dissolved in gamma butyrolactone to make a solution containing 15% by weight of the polymer which was cast onto a cured Parmod® copper circuit on Teflon-glass and heat treated to dry and cure the resin. The film and the copper were stripped from the temporary substrate and dipped in molten solder. The circuit was solderable, but the film tended to shrink and wrinkle. Similar results were obtained with Probimid polyimide from Olin Chemicals and with LARC-SI

Example 11

An improved method was demonstrated by casting a film of LARC-SI onto an aluminum sheet and soft baking it to remove the NMP solvent. The circuit was then printed on the film with a Parmod® copper mixture similar to that described in Example 5, and the copper and the LARC-SI were cured together at 300°C in wet nitrogen as required by the copper. The circuit could then be overprinted with one or more layers of Espanex soluble polyimide from Nippon Steel Co as a coverlay and cured again under the conditions specified for Espanex. The result was a relatively robust, solderable flexible circuit with all of the dielectric film applied additively to lower cost and eliminate waste

While the invention has been described with reference to preferred embodiments thereof, it will be appreciated by those of ordinary skill in the art that modifications can be made to the structure and form of the invention without departing from the spirit and scope thereof.

--